

# *SDG&E ETP Overview*



## *SDG&E Emerging Technologies Program*

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# Emerging Technologies Program (ETP)

## Introduction

- Statewide program for California Investor Owned Utilities (IOUs) authorized by CPUC
- The Goal of ETP is to quantify energy savings and cost effectiveness for a technology or an approach
- Ultimate goal is to move the product and/or service into customer programs for rebates or incentives
- If a product is cost effective enough it could benefit from a new program design
- SDG&E has 2 full-time and 2 part-time staff for the Emerging Technology Program and an annual budget of ~\$2MM for projects in Energy Efficiency (EE) and Demand Response (DR)



# ETP Mission

"...to increase energy efficiency market demand and technology supply through evaluation of emerging and underutilized advanced technologies to increase customer savings..."

## Emerging Technologies

### Zero Net Energy



### LED Lighting



### HVAC



## Programs

### EE Rebates



### Home Energy Report



### Retail and Manufacturer Strategy



### Contractor Training and outreach

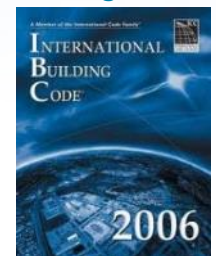


## Codes and Standards

### Appliance Standards



### Building Codes



# Emerging Technologies Coordinating Council (ETCC)

The ETCC supports ETP efforts in the advancement of energy efficiency and demand response initiatives through its leadership, impact and influence in the emerging technology domain. It pursues this objective by strategically engaging with a wide range of external ET stakeholders and effectively and efficiently managing coordination among ETCC members.

Members include:



## Technology Development Support

- Provide resources to transform early-stage technologies / concepts into saleable products
- Develop forward-looking product specifications
- Provide outreach to early-stage entrepreneurs, investors, and analysts (TRIO)

## Technology Assessment

- Evaluate performance claims
- Generate energy savings and cost data required for regulatory approval of a new EE measures

## Technology Introduction Support

- Conduct scaled field placements to foster market traction
- Build demonstration showcases to create visibility / market awareness
- Conduct third-party solicitations using competitive bidding (TRIP solicitation)

# ETP Focus Areas

- Focus Areas ET-EE
  - Lighting
  - HVAC and refrigeration
  - Industry process and advanced controls
  - Advanced gas water heating, super boilers
  - Retrofit technologies
  - Plug loads and associated technologies
  - Energy management systems
  - AMI/HAN integrated technologies
  - Data center (air handling & hardware)
  - ZNE enabling technologies

## *ETP Focus Areas (continue)*

- Focus Areas ET-DR
  - HVAC
  - Advanced controls
  - Energy storage
  - HAN
  - Automating DR
  - Electric vehicles

# *ET Assessment Process and Timelines*

- Assessment Process

- Select Technology
- Identify Technology Champion/Sponsor
- Find Early Adopter/Customer
- Contract Negotiation and Field Demonstration Agreement
- Obtain and Install Products
- Perform Assessment / Complete reports
- Communicate results to program managers
- Post reports to Statewide ETCC website
- Follow up with recommendations (develop custom or deemed measures)

- Timeline

- From 6-12 months for lighting to 12-24 months for HVAC, DR and controls projects